K 052181 p/3

## Special 510(k) Summary of Safety and Effectiveness: Line Extension to the Xia® Spinal System

**Submission Information** 

Name and Address of the Sponsor

of the 510(k) Submission:

Stryker Spine

2 Pearl Court

Allendale, NJ 07401

Contact Person:

Simona Voic

Regulatory Affairs Project Manager

(201) 760 - 8145

Date of Summary Preparation:

August 8, 2005

**Device Identification** 

Proprietary Name:

Xia<sup>®</sup> Spinal System

Common Name:

Spinal Fixation Appliances

Classification Name and Reference: Spinal Interlaminal Fixation Orthosis,

21 CFR §888.3050

Spinal Intervertebral Body Fixation Orthosis

21 CFR §888.3060

Pedicle Screw Spinal System

21 CFR §888.3070

**Predicate Device Information:** 

K013823 Stryker Spine Xia Spinal System

K013688 OSS and Opus Rods – Use with Xia

Spinal System

K002505 Line Extension - Xia Spine System

K043473 Line Extension – Xia Spinal System

**Predicate Device Identification** 

The Xia® Titanium Spinal System consists of Monoaxial and Polyaxial Screws, Washer, Hooks, Blocker, Rods, Staples, Connectors and Multi-Axial Cross Connectors (MACs). The components are manufactured from Titanium material (Ti alloy and CP Titanium).

### **Description of Device Modification**

This submission is intended to address a line extension to Xia<sup>®</sup> Spinal System. The line extension includes a new range of offset and rod to rod Titanium alloy connectors.

#### **Intended Use:**

The Xia® Spinal System is intended for use in the noncervical spine. When used as a pedicle screw fixation system, the Xia® Spinal System is intended for patients: (a) having severe spondylolisthesis (Grades 3 and 4) at the fifth lumbar - first sacral (L5-S1) vertebral joint; (b) who are receiving fusions using autogenous bone graft only; (c) who are having the device fixed or attached to the lumbar and sacral spine; and (d) who are having the device removed after the development of a solid fusion mass.

When used as a pedicle screw fixation system, the Xia<sup>®</sup> Spinal System is also intended to provide immobilization and stabilization of spinal segments in skeletally mature patients as an adjunct to fusion in the treatment of the following acute and chronic instabilities or deformities of the thoracic, lumbar, and sacral spine: degenerative spondylolisthesis with objective evidence of neurologic impairment, fracture, dislocation, scoliosis, kyphosis, spinal tumor, and failed previous fusion (pseudarthrosis).

When used as an anterior screw fixation system or a posterior hook and sacral/iliac screw fixation system, the Xia® Spinal System is indicated for patients with degenerative disc disease which is defined as back pain of discogenic origin with degeneration of the disc confirmed by history and radiographic studies, spondylolisthesis, fracture, spinal stenosis, spinal deformities such as scoliosis, kyphosis, lordosis, tumor, pseudoarthrosis or revision of failed fusion attempts.

The 6mm diameter rods from the DIAPASON<sup>TM</sup> Spinal System and OPUS<sup>TM</sup> Spinal System are intended to be used with the other components of the Xia<sup>®</sup> Titanium Spinal System. The Titanium Multi-Axial Cross Connectors are intended to be used with the other components of the Xia<sup>®</sup> Titanium Spinal System.

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# **Statement of Technological Comparison:**

The subject components share the same intended use, material, and basic design concepts as that of the predicate device: Xia Spinal System (K013823). Mechanical testing also demonstrated comparable mechanical properties to the predicate device.



SEP - 8 2005

Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

Ms. Simona Voic RA Project Manager Stryker Spine 2 Pearl Court Allendale, New Jersey 07401

Re: K052181

Trade/Device Name: Xia Spinal System Regulation Number: 21 CFR 888.3070 (b) (1) Regulation Name: Pedicle screw spinal system

Regulatory Class: II

Product Code: KWP, KWQ, MNH, MNI

Dated: August 8, 2005 Received: August 10, 2005

Dear Ms. Voic:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (240) 276-0120. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <a href="http://www.fda.gov/cdrh/industry/support/index.html">http://www.fda.gov/cdrh/industry/support/index.html</a>.

Sincerely yours,

Mala Malacers

Mark N. Melkerson

Acting Director

Division of General, Restorative,

and Neurological Devices

Office of Device Evaluation

Center for Devices and Radiological Health

Enclosure

### Indications for Use

510(k) Number (if known): K *0*52/8/ Device Name: Xia® Spinal System Indications For Use: The Xia® Spinal System is intended for use in the noncervical spine. When used as a pedicle screw fixation system, the Xia® Spinal System is intended for patients: (a) having severe spondylolisthesis (Grades 3 and 4) at the fifth lumbar - first sacral (L5-S1) vertebral joint; (b) who are receiving fusions using autogenous bone graft only; (c) who are having the device fixed or attached to the lumbar and sacral spine; and (d) who are having the device removed after the development of a solid fusion mass. When used as a pedicle screw fixation system, the Xia® Spinal System is also intended to provide immobilization and stabilization of spinal segments in skeletally mature patients as an adjunct to fusion in the treatment of the following acute and chronic instabilities or deformities of the thoracic, lumbar, and sacral spine: degenerative spondylolisthesis with objective evidence of neurologic impairment, fracture, dislocation, scoliosis, kyphosis, spinal tumor, and failed previous fusion (pseudarthrosis). When used as an anterior screw fixation system or a posterior hook and sacral/iliac screw fixation system, the Xia® Spinal System is indicated for patients with degenerative disc disease which is defined as back pain of discogenic origin with degeneration of the disc confirmed by history and radiographic studies. spondylolisthesis, fracture, spinal stenosis, spinal deformities such as scoliosis, kyphosis, lordosis, tumor, pseudoarthrosis or revision of failed fusion attempts. The 6mm diameter rods from the DIAPASON<sup>™</sup> Spinal System and OPUS<sup>™</sup> Spinal System are intended to be used with the other components of the Xia<sup>®</sup> Titanium Spinal System. The Titanium Multi-Axial Cross Connectors are intended to be used with the other components of the Xia<sup>®</sup> Titanium Spinal System. Prescription Use X Over-The-Counter Use \_ AND/OR (21 CFR 807 Subpart C) (Part 21 CFR 801 Subpart D) (PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED) Concurrence of CDRH, Office of Device Evaluation (ODE) (Division Sign-Off)

Division of General, Restorative,

510(k) Number K 05 2181

and Neurological Devices

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